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10/749,980

12/30/2003

Adrian P. Stephens

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INTEL CORPORATION
c/o INTELLEVATE, LLC
P.O. BOX 52050
MINNEAPOLIS, MN 55402

EXAMINER

PEREZ, ANGELICA

ART UNIT

PAPER NUMBER

2618

MAIL DATE

DELIVERY MODE

05/31/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/749,980

Applicant(s)

STEPHENS, ADRIAN P.

Examiner

Perez M. Angelica

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1, 7, 11 and 16 are rejected under 35 U.S.C. 101 because it appears that the method has only one step which, end result does not do anything. There is no "useful, concrete and tangible result". Modifications to the claims are necessary in order to comply with the statute.

Response to Arguments

3. Applicant's arguments filed 3/1/2007 have been fully considered but they are not persuasive.

In the remarks, the applicant argues in substance:

(A) In page 6, "*Billhartz* contains no teaching...of determining if there is a better channel available for use in response to an indication associated with an arrival of a co-channel wireless network..."

In response to argument (A), the examiner would like to point where given a broad reasonable interpretation to the claim, the system will perform a hand over to a channel that has a better channel performance than the current one. There is no reason for the system to switch to a channel that is in worst condition than the currently connected one. Therefore, it must be determined prior to changing channels that the replacing channel is better than the one that is going to be replaced. E.g., see

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paragraph 13 where there is an inquiry about the performance of the second channel, thus, knowledge of a better channel exist.

(B) In page 7, "*Billhartz* contains no teaching... of comparing at least a subset of information received in a security report from a legitimate access point with information previously stored to determine if a rouge access point is present...*Kim*...does not in fact cure, the above deficiency of *Billhartz*..."

In response to argument (B), the examiner would like to point where none of the claims 5-20 contain the alleged limitation of "comparing at least a subset of information received in a security report from a legitimate access point with information previously stored to determine if a 'rouge' access point is present". However, if the applicant refers to the determining of a better channel present, the limitation has been addressed already in part A.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim (Kim et al.; US 2003/0087645 A1).

Regarding claim 1, Billhartz teaches of a method comprising: determining if there is a better channel available for use in response to an indication associated with an arrival of a co-channel wireless network (paragraphs 1, 12-17; where the variety of nodes constantly monitor the channel available in order to acquire one with better quality).

Regarding claim 2, Billhartz teaches all the limitations of claim 1. Billhartz further teaches of notifying station(s) to change to a different channel (paragraphs 14 and 17; e.g., "broadcast a channel change message").

Regarding claim 3, Billhartz teaches all the limitations of claim 1. Billhartz further teaches of notifying station(s) to restrict a channel width set (paragraph 14; where the change is made according to an available bandwidth).

Regarding claim 4, Billhartz teaches all the limitations of claim 3. Billhartz further teaches of where notifying station(s) to restrict a channel width set comprises: notifying station(s) to remove widths from a channel width set that are not present in a channel width set of the co-channel wireless network (paragraph 34; where the examiner is interpreting where the bandwidths of channels that are interfering are removed, co-channel interfering ones).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 7-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim in view of Billhartz (Billhartz, Tom; US 2004/0203820 A1).

Regarding claims 7, 11 and 16, Kim teaches of an electronic appliance, apparatus (figure 2, item 14) and storage medium (figure 2, item 24), comprising: one or more dipole antenna(e) (figure 2, item 38); one or more wireless network interface(s), coupled with the one or more dipole antenna(e), to communicate with other devices (figure 12, items 33 and 22 coupled to items 38; where interfaces are designed for communication with other devices); control logic coupled with the wireless network interface(s) (figure 2, item 20), and a manager engine coupled with the wireless network interface(s) (paragraphs 26 and 28; where the network management system or AP requires interfacing with the elements of the system, where the management system checks and manages the allocation of channels according to load, quality).

Kim does not specifically teach where the manager engine determines if there is a better channel available to use in response to an indication associated with an arrival of a co-channel wireless network.

Billhartz better teaches if there is a better channel available to use in response to an indication associated with an arrival of a co-channel wireless network (paragraphs 1, 12-17; where the variety of nodes constantly monitor the channel available in order to acquire one with better quality).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Kim's appliance with Billhartz' better channel availability in order to "efficiently make use of a plurality of channels", as taught by Billhartz.

Regarding claims 9, 13 and 18, Kim and Billhartz teach all the limitations of claims 1, 11 and 16, respectively. Billhartz further teaches of notifying station(s) to change to a different channel (paragraphs 14 and 17; e.g., "broadcast a channel change message").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Kim's appliance with Billhartz' notification in order for the other units to adjust their channel data tables, as taught by Billhartz.

Regarding claims 15 and 20, Kim and Billhartz teach all the limitations of claims 13 and or claim 16, respectively. Kim further teaches where the control logic to notify station(s) comprises control logic to transmit an Institute of Electrical and Electronics Engineers (IEEE) 802.11 compliant beacon (paragraphs 29 and 34).

Regarding claims 8, 12 and 17, Kim and Billhartz teach all the limitations of claims 7, 11 and 16, respectively. Kim further teaches where the control logic to determine if there is a better channel available to use comprises control logic to search for an unused channel (paragraph 34: e.g., "idle channel").

Regarding claims 10, 14 and 19, Kim and Billhartz teach Billhartz teaches all the limitations of claim 1.

Billhartz further teaches of notifying station(s) to restrict a channel width set (paragraph 14; where the change is made according to an available bandwidth).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Kim's appliance with Billhartz' channel restrictions according to bandwidth availability in order to better use the available resources, as taught by Billhartz.

8. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Billhartz in view of Kim.

Regarding claim 5, Billhartz teaches all the limitations of claim 5.

Kim further teaches where the to determine if there is a better channel available to use comprises to search for an unused channel (paragraph 34: e.g., "idle channel").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Billhartz's appliance with Kim's idle channel determination in order to better allocate channels, as taught by Kim.

Regarding claim 6, Billhartz teaches all the limitations of claim 5.

Kim further teaches where the control logic to notify station(s) comprises control logic to transmit an Institute of Electrical and Electronics Engineers (IEEE) 802.11 compliant beacon (paragraphs 29 and 34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Billhartz's appliance with Kim's (IEEE) 802.11 protocol

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in order to for terminals to communicate with each other according to the (IEEE) 802.11 standards, as taught by Kim.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

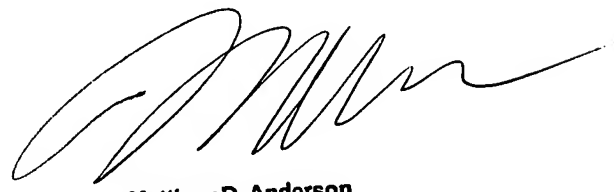
10. Enquiry concerning this communication or earlier communications from the examiner should be directed to Angelica Perez whose telephone number is 571-272-7885. The examiner can normally be reached on 6:00 a.m. - 1:30 p.m., Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571) 272-4177. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either the PAIR or Public PAIR. Status information

for unpublished applications is available through the Private PAIR only. For more information about the pair system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Information regarding Patent Application Information Retrieval (PAIR) system can be found at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600's customer service number is 703-306-0377.


Angelica Perez
Examiner
Matthew D. Anderson
Supervisory Patent Examiner

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May 22, 2007